CLAIMS

1. Modular kit for a tower having a height ranging between a minimum height and a maximum height, in particular for a wind energy turbine, comprising:
   - a first conical tower segment (10) comprising a steel tube having a predetermined length (l1),
   - a second conical tower segment (12) comprising a steel tube having a predetermined length (l2), and
   - and a first cylindrical tower segment (14) comprising a steel tube having a length between a predetermined minimum length and a predetermined maximum length,
   - wherein the length of the first cylindrical tower segment (14) can be adapted to the necessary height of the tower between its minimum height and its maximum height, the minimum height being the sum of the predetermined lengths (l1,l2) of the first and second conical tower segments (10,12) and the minimum length of the first cylindrical tower segment (14), and the maximum height being the sum of the predetermined lengths (l1,l2) of the first and second conical tower segments (10,12) and the maximum length of the first cylindrical tower segment (14).

2. Modular kit according to claim 1, wherein the first cylindrical tower segment (14) comprises a door opening (18).

3. Modular kit according to claim 1, further comprising a second cylindrical tower segment (16) comprising a steel tube having a door opening and a length, wherein the minimum height of the tower is the sum of the predetermined lengths (l1,l2) of the first and second conical tower segments (10,12), the minimum length of the first cylindrical tower segment (14) and the length of the second cylindrical tower segment (16) and wherein the maximum height of the tower is the sum of the

predetermined lengths (l1,l2) of the first and second conical tower segments (10,12), the maximum length of the first cylindrical tower segment (14) and the length of the second cylindrical tower segment (16).

4. Modular kit according to claim 3, wherein the length of the second cylindrical tower segment (16) is selectable between a predetermined minimum length and a predetermined maximum length, wherein the minimum height of the tower is the sum of the predetermined lengths (l1,l2) of the first and second conical tower segments (10,12) and the minimum lengths of the first and second cylindrical tower segments (14,16) and wherein the maximum height of the tower is the sum of the predetermined lengths (l1,l2) of the first and second conical tower segments (10,12) and the maximum lengths of the first and second cylindrical tower segments (14,16).

5. Modular kit according to claim 1 comprising a further tower segment (24) of reinforced concrete comprising a door opening (26) and having a length, and a connecting element (28) for connecting the first cylindrical tower segment (14) with the further tower segment (24) and having a length, wherein the minimum height of the tower is the sum of the predetermined lengths (l1,l2) of the first and second conical tower segments (10,12), the minimum length of the first cylindrical tower segment (14) and the lengths of the further tower segment (24) and the connecting element (28) and wherein the maximum height of the tower is the sum of the predetermined lengths (l1,l2) of the first and second conical tower segments (10,12), the maximum length of the first cylindrical tower segment (14) and the lengths of the further tower segment (24) and the connecting element (28).

6. Modular kit according to claim 5, wherein the length of the further tower segment (24) is selectable between a predetermined minimum length and

a predetermined maximum length, wherein the minimum height of the tower is the sum of the predetermined lengths (l1,l2) of the first and second conical tower segments (10,12), the minimum length of the first cylindrical tower segment (14), the minimum length of the further tower segment (24), and the length of the connecting element (28), and wherein the maximum height of the tower is the sum of the predetermined lengths (l1,l2) of the first and second conical tower segments (10,12), the maximum length of the first cylindrical tower segment (14), the maximum length of the further tower segment (24), and the length of the connecting element (28).

7. Modular kit according to any one of claims 1 to 6, wherein the further tower segment (24) is of a conical configuration.

8. Modular kit according to any one of claims 1 to 7, wherein the first and second conical tower segments (10,12) each have a wall thickness decreasing towards their upper ends in the installed condition of the tower.

9. Modular kit according to any one of claim 1 to 8, wherein the first cylindrical tower segment (14) and/or, if present, the second cylindrical tower segment (16) each comprise an essential constant wall thickness over its/their length.